

PREFACE TO THE SITE TRANSITION FRAMEWORK FOR LONG-TERM STEWARDSHIP

This document provides a framework for the transition of a site or portions of a site from cleanup to long term stewardship. The framework is a tool to help facilitate a smooth transition from remediation into long-term stewardship, and provides a checklist approach for affected parties. The goal is to ensure that nothing in the closeout process has been overlooked and that appropriate actions have been completed prior to a site's transfer into long-term stewardship.

This framework identifies specific information and data requirements; however, it is only a framework and should be adapted to accommodate unique site-specific requirements, needs, and documents. Exceptions to the framework are expected and should be worked out on a site basis by the affected and responsible parties. Ideally, this framework should be used as early in the remediation process as possible. Subsequent reviews should be conducted and used to verify that all appropriate steps have been, or will be taken, to close out the site and prepare it for long-term stewardship.

This document does not, in any way, serve as a replacement for, or alternative to, the required regulatory processes. This framework is not intended to impose additional requirements on the owners or operators of the sites. Furthermore, it should not be interpreted as a land transfer mechanism.

The Department of Energy is applying the draft framework on an informal basis to a variety of sites that are scheduled to transition from closure to long-term stewardship (e.g., a FUSRAP site, a UMTRCA Title II site, the Weldon Spring and other closure sites, and continuing mission sites). Upon approval, the intention is to apply the framework on a more systematic basis.

SITE TRANSITION FRAMEWORK FOR LONG-TERM STEWARDSHIP

I. Authority and Accountability are Assigned and Documented:

- This section reviews the assignment of accountability and authority for responsible and affected parties for long-term stewardship.
- A. All documents allocating the roles and responsibilities of responsible and affected parties have been approved and signed (e.g., Memorandum of Agreement, Memorandum of Understanding, or Interagency Agreement, Cooperative Agreement).
- B. Each federal or non-federal entity who will be responsible for long-term stewardship activities listed in section I(A) have been identified. Funding sources for each activity have been identified.
- C. Appropriate governmental policies and procedures for managing resources are incorporated into the long-term stewardship plan and agreements.
- D. The legal authority under which long-term stewardship will be conducted has been identified and documented.
- E. Authorities relating to Institutional Controls are discussed in paragraph IV.

II. Site Conditions are Accurately and Comprehensively Documented:

- All documentation identifying site historical uses, characterization, and remedial action, including the Preliminary and Final Closeout Reports have been completed and made available to the public.
- A. The site at the time of closure, including all remedies and remaining hazards, has been described. Examples include:
 1. Physical features of the site, including, site topography, geology, hydrogeology, site and area boundaries, etc.
 2. Locations of active, inactive, and decommissioned buildings, structures, and surface and subsurface infrastructure (e.g., utilities).
 3. Locations of residual hazards and associated engineered and institutional control systems.
 4. Locations of groundwater wells, wastewater outfalls, and air quality monitoring stations. Information has been depicted on-site maps.
 5. For those sites undergoing closure, locations of off-site buildings and structures, important ecological resources, and associated potential receptors in the vicinity of the site.
 6. Characteristics of the remaining contaminants (e.g., radioisotope, activity, and physical form).
 7. If a "No Further Action" has been reached and agreed to, this should also be indicated.
- B. For those sites undergoing closure, a conceptual site model for long-term stewardship has been completed, showing the relationships between existing residual hazards, environmental transport mechanisms, exposure pathways, and human/ecological receptors.
- C. All remedial action documentation has been completed and approved by regulators.

- D. Results of any Natural Resource Damage Assessment, where applicable, performed with associated documentation has been made available. This assessment should discuss the parties' potential environmental liability at the site.

III. Engineered Controls, Operation & Maintenance Requirements, and Emergency/Contingency Planning are Documented:

- A. Engineered controls have been identified and documented, information should include:
 - 1. Design and construction drawings, specifications, and completion report.
 - 2. Site physical and geotechnical data.
 - 3. Locations of engineered controls accurately identified and depicted on site maps.
 - 4. Identification of on-going remediation and related waste management activities.
 - 5. Performance history assessments indicating successful operation.
 - 6. A life-cycle cost estimate, including basis and assumptions. The life-cycle cost estimate should be based on best available data, recognizing that in most cases the long-term stewardship activities may be on-going for decades.
 - 7. A master schedule of on-going activities has been made available, including exit criteria outlining when engineered controls are no longer necessary.
- B. Operation & Maintenance (O&M) activities have been documented, funding is in place, and a party has been selected to perform the necessary activities.
 - 1. Surveillance and monitoring requirements have been documented (e.g., scope frequency, reporting, process descriptions, and analytical parameters & methods). This document should allow for changes that are consistent with the selected remedy.
 - 2. The cost, including basis and assumptions, of operations, maintenance and surveillance activities have been determined and documented. The request for funding should be in accordance with applicable budget appropriations procedures.
 - 3. An agreement is in place for performance of all O&M activities.
- C. Emergency/Contingency planning and the authority and responsibilities to implement have been identified.
 - 1. Uncertainties associated with residual hazards, fate and transport mechanisms, exposure pathways, and the effectiveness of long-term stewardship activities have been identified.
 - 2. Scenarios related to each uncertainty have been identified (e.g., failure scenarios).
 - 3. Roles, responsibilities, and procedures to respond to each scenario have been established.

IV. Institutional Controls and Enforcement Authorities are Identified:

- A. Land Use/Institutional Controls have been implemented and approved by the regulator. All institutional control components of each implemented remedy are described (e.g., future lands use assumptions upon which each implemented remedy is based, associated land use restrictions).
 - 1. On-site and off-site land uses for each area (property) and its associated land use assumptions have been identified.
 - 2. Procedures for managing, assessing potential changes, and enforcing on-site and off-site (as appropriate) land uses have been documented and are being conducted.

3. Institutional controls established as part of an implemented remedy have been identified.
4. Roles and responsibilities have been outlined for responding to requests to change existing land uses.
5. Procedures have been put in place for periodic review of land uses. Performance history indicating successful operation has been provided.
6. Procedures for management and periodic reassessment of institutional control restrictions are in place.
7. Off-site easements implemented to ensure the protectiveness of the remedy have been documented.
8. Exit criteria outlining when engineered controls are no longer necessary has been documented.

B. Property records (as required by applicable regulations and/or guidance).

1. The site's real estate history has been documented, including identification of former property owners, deed restrictions, or other land use restrictions.
2. Site boundaries and site markers are easily identified and documented.
3. On-site and off-site easements, rights of way, and other property access rights have been established and documented.
4. Water, mineral, and other natural resource rights have been identified.
5. Tribal treaty rights and other U.S. Government obligations have been identified.
6. Areas where long-term stewardship activities will be conducted have been documented in the property records.

V. Regulatory Requirements and Authorities are Identified:

- Regulatory requirements regarding residual contamination have been identified. All regulatory documents are maintained and available to the public (e.g., Records of Decision, RCRA Permits and Corrective Action Decisions, Consent Orders, Interagency Agreements, Federal Facility Agreements).
- A. Regulatory decision documents and associated site characterizations have been identified and are either complete or scheduled for completion and are maintained in accordance with regulatory requirements.
 - B. The implemented remedy and associated long-term stewardship activities are certified to be in compliance with all regulatory requirements (e.g., appropriate agreements have been entered into with appropriate regulator).
 - C. Five-Year Review results have been made available. Future five-year reviews, including supplemental analysis of site-wide Environmental Impact Statements, should be planned and consistent with EPA guidance.
 - D. EPA NPL Status and/or RCRA permit status have been clearly indicated (e.g., de-listing, partial de-listing, non-NPL).
 - E. NRC License Status has been established. This should identify the license holder and the development of license transfer plans.
 - F. Locations of documents have been identified and are accessible.

VI. Long-Term Stewardship Budget, Funding, and Personnel Requirements are Identified:

- A. A technical baseline document for long-term stewardship programs and activities at the site has been developed.
- B. Funding (consistent with technical baseline).
 - 1. Funds for long-term surveillance and maintenance have been identified and are available or requested.
 - 2. Estimates for the annual funding requirements for long-term stewardship activities, associated oversight, and information management requirements have been derived.
 - 3. Funding assurances have been made based on those estimates.
 - 4. Mechanisms to transfer funds required for long-term stewardship have been established.
 - 5. Funding mechanisms for long-term stewardship activities and regulatory oversight activities conducted by other federal and non-federal entities have been established (e.g., documentation of financial assurance agreements for long-term monitoring and surveillance funding).
 - 6. Estimates required for financial assurance payments have been determined.
 - 7. Authority has been granted to the steward to use, or have access to, funds related to long-term stewardship.
- C. Personnel requirements have been identified (for activities not previously addressed within this set of criteria).
 - 1. Personnel functions and qualifications necessary for the technical implementation and administration of long-term stewardship activities have been identified.
 - 2. A determination for the need of other on-site personnel has been made identifying the specific duties that may be required.
 - 3. A closeout plan for the disposition of excess federal full time equivalents has been developed.
- D. A business close out process has been developed.

VII. Information and Records Management Requirements are Satisfied:

- A. The Transfer of Information.
 - 1. Information needed for long-term stewardship has been identified and transferred.
 - 2. Practices and procedures for the collection, evaluation, storage, retrieval, and use of this information have been established (e.g., evaluation of new technologies).
 - 3. Location for storage of information has been identified. Where the information will be placed has occurred.
- B. Information management planning has been performed and is acceptable to the stakeholders.
 - 1. Systems and procedures for the transfer of archival long-term stewardship information in one or more on-site or off-site repositories have been developed.
 - 2. Retention schedules that are appropriate for the management of information for long-term stewardship have been determined.

3. Systems and procedures to establish and facilitate public access to and retrieval of information critical to long-term stewardship are in place. Examples could include, but are not limited to, internet access, local library, on-site information center (e.g., Interpretive Center, Museum, etc.), etc.
4. Classes of LTS information users have been identified and the retention and retrieveability requirements identified and implemented.

VIII. Public Education, Outreach, Information and Notice Requirements are Documented and Satisfied:

- A. List of site stakeholders with associated address information has been developed and updated.
- B. Community involvement tools have been developed and are being used at regular intervals (e.g., fact sheets, newsletters, inspection reports, 5-year review results, email notifications, public meetings, etc.).
- C. Costs associated with public involvement have been estimated (e.g., Oversight Committees, meeting locations, etc.). Where approved, any such cost would be included in the funding requests.
- D. Updates of the administrative record/information repository on-site are annually (at a minimum) made available to interested parties.

IX. Natural, Cultural and Historical Resource Management Requirements are Satisfied:

- A. A discrete system or process is in place to protect information about sensitive and natural resources.
- B. Biological resources, threatened and endangered species, archeological and cultural resources, Native American treaty rights, and/or other natural and cultural resource issues have been addressed.
- C. Locations and characteristics of natural and cultural resources, needing long-term stewardship, have been identified (e.g., precise locations of cultural and natural resources). A management system is in place and operating successfully.